REMARKS

Applicants thank the Examiner and the Examiner's supervisor for the courtesy extended to Applicants' attorney and Applicants' assignee's representative during the interview held June 13, 2006, in the above-identified application. During the interview, Applicants' attorney explained the presently-claimed invention and why it is patentable over the applied prior art, and discussed other issues raised in the Office Action. The discussion is summarized and expanded upon below.

The rejection of Claims 1, 2 and 4-12 under 35 U.S.C. § 103(a) as unpatentable over US 6,299,977 (Takeyama et al) in view of US 4,525,169 (Higuchi et al) and further evidenced by US 4,914,764 (Mast et al), is respectfully traversed. The claims now all contain the limitations of Claim 3, not subject to this rejection. Accordingly, it is respectfully requested that this rejection be withdrawn.

The rejections of claims under 35 U.S.C. § 103(a) as unpatentable over Takeyama et al in view of Higuchi et al and further evidenced by Mast et al, and in further view of JP 09-59881 (JP '881), for Claims 3, 16, 18 and 19, or in further view of JP 09-59882 (JP '882), for Claims 3 and 16-20, are respectfully traversed.[1]

As recited in above-amended Claim 1, the present invention is a suede artificial leather comprising a three-dimensional entangled body comprising a superfine fiber having a fineness of 0.2 dtex or less and an elastomeric polymer A impregnated in the three-dimensional entangled body, the suede artificial leather satisfying the following requirements (1) to (4):

(1) a pigment A in an amount of 0.1 to 8% by mass is embedded in the superfine fiber, wherein the pigment A is at least one pigment selected from the group consisting of an

[1] Applicants gratefully acknowledge receipt by Applicants' attorney of English translations of JP '881 and JP '882 during the above-referenced interview.

organic pigment having an average particle size of 0.01 to 0.3 μm and carbon black having an average particle size of 0.01 to 0.3 μm;

(2) a pigment B in an amount of 1 to 20% by mass is embedded in the elastomeric polymer A, the pigment B being at least one pigment selected from the group consisting of an organic pigment having an average particle size of 0.05 to 0.6 μm and carbon black having an average particle size of 0.05 to 0.6 μm, or the pigment B being a pigment particle having an average particle size of 0.05 to 0.6 μm containing an organic pigment;

(3) the ratio of the elastomeric polymer A to the three-dimensional entangled body is 15:85 to 60:40 by mass; and

(4) an average raised nap length of the superfine fiber present on the surface of the suede artificial leather is 10 to 200 μm.

The present invention is intended to solve problems of the prior art, particularly color development and color fastness problems associated with suede artificial leathers comprising superfine fibers and an elastomeric polymer, conventionally colored with dyes, as described in the specification under "Description of the Prior Art," beginning at page 1, line 10. The present invention thus relates to a suede artificial leather having, *inter alia*, excellent color fastness to light and color development in a wide variety of colors.

As Applicants have previously pointed out, Takeyama et al relates to the appearance and structure of non-woven fabrics suited for forming man made leathers, but is not concerned with any advances in the art of coloring such leathers, since Takeyama et al discloses that "common processes such as dyeing processing . . . are optionally applied on arbitrary stages" (column 10, lines 60-65 and column 16, lines 45-50) in the manufacturing process of their man made leather. The Examiner relies on Example 2 therein (column 23, line 44ff), which describes first making a nubuck-like man made leather, and then dyeing it

by a customary dyeing process. Thus, the dyestuff is present only on the surface of the fine fibers and the impregnated elastomer.

It is noted that the Examiner has not responded to this argument.

In the presently-claimed invention, on the other hand, pigment A is **embedded** in the superfine fiber, and pigment B is **embedded** in the elastomeric polymer A, which embedding is defined in the specification at page 9, line 24 through page 10, line 3 and page 24, lines 17-24. An example of such embedding is described in Example 1, in the specification beginning at page 52, line 9, wherein the superfine fiber-forming composite fibers are produced by spinning a raw material including a mixture of a pigment A and a polymer for forming the superfine fibers, after which a water-dispersed emulsion of a polyurethane, as elastomeric polymer A, containing pigment B was impregnated into the fiber-entangled non-woven fabric.

Thus, aside from the fact that the present invention uses pigments, while Takeyama et al employs conventional dyeing, the distribution of pigments in the present invention is significantly different from the distribution of dyes in Takeyama et al.

It is noted that the present Office Action does not respond to the above arguments.

The Examiner relies on Higuchi et al for its disclosure of a coating layer, as well as the use of pigments.

In response to Applicants' argument that the coating layer constitutes the grain surface which is formed on the fibrous substrate layer comprising ultra fine fibers and elastomer, and that the grain surface and the fiber surface have different functions and require different properties, the Examiner finds that these are features **of the present invention** (emphasis by Applicants) upon which Applicants rely.

In reply, Applicants' argument, as stated above, was with regard to **Higuchi et al**, not the present invention. Thus, Higuchi et al discloses an artificial leather consisting of a

fibrous substrate and a coating layer, wherein the substrate comprises at least two kinds of different color hues and/or lightness shades, and the coating layer is transparent (column 1, lines 8-13), such that a three-dimensional surface effect, which looks like a single color at a distance but up close reveals of mixture of different colored fibers, is achieved (column 1, lines 42-63). Higuchi et al discloses further that their fibrous substrate may contain conventional viscoelastic substances such as polyurethane (column 3, lines 19-22). However, the fibers are dyed with dyestuffs, not pigments (column 3, line 30ff). The only disclosure of possibly using pigments is with regard to the transparent coating layer (column 5, line 59ff).

During the above-referenced interview, the Examiner noted that the claims did not exclude a structure of elastomeric polymer A coated onto the three-dimensional entangled body. However, this issue is now moot, in view of the above-discussed amendment. Thus, as Applicants have previously argued, Higuchi et al adds nothing to the inventive concept herein which involves improvement of the fibrous substrate. In addition, Higuchi et al discloses the dyeing of only staple, filament, or fibrous sheet by bath dyeing methods (column 4, line 67 to column 5, line 5), and thus suffers from similar deficiencies as Takeyama et al with regard to a lack of disclosure of embedding the pigments in the fiber and in the elastomeric polymer.

The Examiner states that Higuchi et al was combined with Takeyama et al for its disclosure of the use of pigments to dye in Takeyama et al. In reply, even if Takeyama et al used pigments instead of dyes, the result would still not be the presently-claimed invention which, as discussed above, is defined by a particular structure wherein pigment A and pigment B are embedded in respective components.

In response to Applicants' previous argument that one skilled in the art would not have combined Example 2 of Takeyama et al and Higuchi et al, since Example 2 of Takeyama et al relates to a nubuck-like leather, which leather has no grain surface, the

Examiner, in effect, finds that this is irrelevant since, as discussed above, the Examiner states that Higuchi et al is only relied on for their disclosure of a pigment to dye leather. However, it is well-known that an Examiner may not simply pick and choose disclosures which support his case, while ignoring disclosure which teaches against it. In sum, and as discussed above, one skilled in the art would not combine a disclosure of Higuchi et al's coating layer with Takeyama et al's nubuck-like leather having no grain surface. (Indeed, Takeyama et al distinguishes nubuck-like man made leather from grain type nubuck-like man made leather.)

Mast et al relates to a process for the bath pigmentation of leather and, like Takeyama et al, is drawn to the pigmentation of already-formed leather.

JP '881 discloses an artificial leather of black suede tone comprising a bundle of ultra fine fibers containing a black IR-reflecting pigment, the black-colored fiber impregnated with an elastic polymer such as a polyurethane. The Examiner finds that the black pigment is present in the fibers in an amount of greater than or equal to 5%. Relying on the disclosure of pigment and amount thereof in JP '881, the Examiner holds that it would have been obvious to use this pigment and in this amount in Takeyama et al.

In reply, without the present disclosure as a guide, one skilled in the art would not have combined Takeyama et al with JP '881, or together with the above-applied prior art. Again, Takeyama et al uses a dye, not a pigment, and is not at all concerned with coloring leathers. Nor could the combination of applied prior art predicted the unexpected results shown by the comparative data of record, discussed *infra*.

JP '882 discloses a black artificial leather comprising a resin layer as a silver surface layer, such as a polyurethane resin layer, containing an IR-reflecting black pigment, laminated on an ultra fine fiber base, which may contain carbon black. The Examiner's position with regard to JP '882 is essentially the same as with regard to JP '881, except for

the percentage amount of the carbon black. Thus, Applicants' reply herein is the same as the reply with regard to the rejection relying on JP '881.

While the Examiner treats Claims 6-11 separately, these claims are separately patentable, because the above combination of prior art neither discloses nor suggests limitations of these claims.

In the previous response, Applicants noted the comparative data in the specification between the presently-claimed invention (Examples 1-11) and suede artificial leathers outside the terms of the present claims (Comparative Examples 1-10). The comparative examples, described in the specification beginning at page 60, line 9, are, for the most part, similar to the presently-claimed invention, but a parameter has been adjusted to be outside the terms of the claims, or, for example, a dye has been used instead of a pigment. In all cases, the comparative examples produced inferior results.

In the present Office Action, the Examiner has not commented at all on this data. This data highlights the significance of the various requirements (1)-(4) of the present claims. Thus, Comparative Example 1, which uses carbon black in the superfine fiber in an amount of 10% by mass, demonstrates the importance of the presently-recited maximum for pigment A. Comparative Example 2 demonstrates the importance of using either an organic pigment or carbon black, as opposed to an inorganic pigment, as pigment A. Comparative Example 3 demonstrates the importance of impregnating pigment A in the superfine fiber, as opposed to disperse-dyeing this fiber. Comparative Example 4 demonstrates the importance of the superfine fiber having a fineness of 0.2 dtex or less. Comparative Example 5 demonstrates the importance of the presence of pigment B. Comparative Example 6 demonstrates the importance of the maximum amount for pigment B. Comparative Example 7 demonstrates the importance of pigment B being an organic pigment or carbon black, as opposed to an inorganic pigment. Comparative Example 8 demonstrates the importance of requirement (3),

i.e., that the ratio of elastomeric polymer A to the three-dimensional entangled body not be less than the minimum of the ratio range recited. Comparative Example 9 also demonstrates the importance of above-discussed requirement (3), analogous to Comparative Example 8, but at the other end of the range. Finally, Comparative Example 10 demonstrates the importance of impregnating pigments in both the superfine fiber and the elastomeric polymer, compared to coloring the fiber-entangled nonwoven fabric with a black pigment for exhaustion coloring in an amount of 20% by mass of the fiber by circular dyeing machine, and thereafter impregnating an acrylic water-dispersed elastomeric polymer into the fiber-entangled nonwoven fabric.

The applied prior art does not present a *prima facie* case of obviousness. Nevertheless, the Examiner must still evaluate the superior results demonstrated herein. In addition, the comparative examples are closer to the presently-claimed invention than any of the prior art applied above. Compare *Ex parte Humber*, 217 USPQ 265 (Bd. Pat. App. & Inter. 1981) **(copy enclosed)** (comparative data showing the claimed chlorine-containing compounds to be unexpected over various (non-prior art) chlorine-containing isomers was accepted as more probative over prior art, drawn to non-chlorine containing analogs of the claimed compounds, asserted to be closest.)

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1-12 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Indeed, the rejection is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that it be withdrawn.

Since no fact-finding on, or rebuttal of, various (although not all) arguments of patentability presented in the previous response was made in the present Office Action, as detailed above, thus depriving Applicants of an opportunity to challenge such fact-finding,

Applicants respectfully request that the next Office Action not be made Final, if it is not a Notice of Allowance.

All of the presently active claims in this application are now believed to be in immediate condition for allowance. The Examiner is respectfully requested to rejoin the non-elected method claims, and in the absence of further grounds of rejection, pass this application to issue with all pending claims.

Respectfully submitted,

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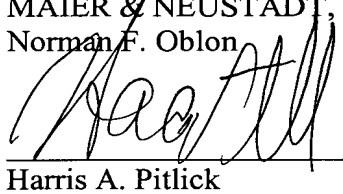
Norman F. Oblon



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FULL TEXT OF CASES (USPQ FIRST SERIES)
Ex parte Humber, Bruderlein, and Asselin, 217 USPQ 265 (BdPatApp&Int 1981)

Ex parte Humber, Bruderlein, and Asselin, 217 USPQ 265 (BdPatApp&Int 1981)

Ex parte Humber, Bruderlein, and Asselin

(BdPatApp&Int)
217 USPQ 265

Opinion dated Nov. 13, 1981
U.S. Patent and Trademark Office, Board of Patent Appeals and Interferences

Headnotes

PATENTS

1. Patentability — Composition of matter (§ 51.30)

Consistent with In re Holladay, 199 USPQ 516, applicants may show improved results for their claimed compounds in comparison with compounds that are even more closely related than those of prior art relied upon by Examiner in order to rebut prima facie case.

Particular patents — Chlorinated Compounds

Humber, Bruderlein, and Asselin, 13-Chloro-Benzocycloheptapyridoisoquinoline Derivatives and Process Therefor, rejection of claims 1-3 and 5-9 reversed.

Case History and Disposition:

Appeal from Art Unit 122.

Application for patent of Leslie G. Humber, Francois T. Bruderlein, and Andre A. Asselin, Serial No. 817,660, filed July 21, 1977. From decision rejecting claims 1-3 and 5-9, applicants appeal (Appeal No. 443-29). Reversed.

Attorneys:
John W. Routh, New York, N.Y., for appellant.

Judge:
Before Blech and Goldstein, Examiners-in-Chief, and Seidleck, Acting Examiner-in-Chief.

Opinion Text

Opinion By:
Blech, Examiner-in-Chief.

This is an appeal from the final rejection of claims 1 through 3 and 5 through 9, all the claims remaining in the case.

Representatives of the claimed invention are:

> 1. A compound of formula 1
> *Tabular, graphic, or textual material set at this point is not available. Please consult hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.*
>
> in which R is lower alkyl selected from the group consisting of straight chain alkyl having up to six carbon atoms and branched chain alkyl having up to four carbon atoms or R is cycloalkyl having 3-6 carbon atoms, or a pharmaceutically acceptable acid addition salt thereof.
>
> 5. A method of producing neuroleptic effects in a mammal which comprises administering to said mammal an effective neuroleptic amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
>
> 6. A pharmaceutical composition for producing neuroleptic effects in a mammal comprising an effective neuroleptic amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

The references cited by the Examiner are:

Table set at this point is not available. See table in hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.

Winthrop et al (Winthrop), J.O.C., 27, pp. 230-240, 1962.

Voith et al (Voith), Psychopharmacologia, 42, pp. 11-20, 1975.

Humber et al (Humber II), Abstract of Papers, 167th ACS National Meeting, Los Angeles, Calif., March 31-April 5, 1974.

Bruderlein et al (Bruderlein II), J. Med. Chem., Vol. 18, pp. 185-188, 1975.

The appealed claims stand rejected for obviousness under 35 U.S.C. 103. The Examiner considers them to be unpatentable over Voith and Bruderlein II in view of Humber I and Winthrop.

The non-chlorinated analogs of the claimed compounds, specifically also of the preferred species wherein R in the formula above set forth is isopropyl (named "Butaclamol"), are known, as shown by Voith and Bruderlein II. It is the Examiner's position that the claimed 13-Cl substituted derivatives thereof would be prima facie obvious to the artisan in light of the teachings of Humber I and Winthrop and that this presumption of obviousness has not been adequately rebutted by the Declaration evidence

of record.

We cannot subscribe to the Examiner's holding. It is predicated on the assumption that chlorination, in general, is well known in the pharmaceutical art and since related compounds possessing neuroleptic properties are known to be useful in either their non-chlorinated or chlorinated forms that the claimed compounds are thus obvious. Such an assumption manifestly is bottomed on the proposition that the position in the molecule at which the chlorination occurs is inconsequential and of no significance. But such is contraindicated by the very art relied upon by the Examiner, as well as by the Voith Declaration under 37 CFR 1.132. Thus, from the teaching of Winthrop the artisan would favor the 14-Cl substituted compound inasmuch only its precursor is disclosed to have increased activity. The Voith Declaration, however, convincingly demonstrates unexpectedly significant improved results for the 13-chloro vis-a-vis the 9-Cl, 12-Cl and 14-Cl substituted compounds. Such clearly could not have been foreseen and rebuts the Examiner's basic premise of equivalency of chlorination no matter at which position it is effected.

[1] Of course we appreciate and are cognizant of the Examiner's contention that no improved results have been shown for the claimed chlorinated compounds vis-a-vis the non-chlorinated analog butaclamol. However, consistent with the holding by the court in In re Holladay, 584 F.2d 384, 199 USPQ 516 (CCPA 1978), appellants may show improved results for their claimed compounds in comparison with compounds which, in fact, are even closer related than those of the prior art relied upon by the Examiner in order to rebut the prima facie case. Consequently, the comparative showing vis-a-vis the other chlorinated compounds which are more similar to those claimed than the non-chlorinated derivatives is viable probative evidence which palpably must be held as refuting the presumption of obviousness engendered by the art.

Accordingly, the decision of the Examiner is reversed.

Reversed.

- End of Case -